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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/808,629	03/24/2004	Dennis Cox	062891.0638	6090

5073 7590 10/09/2007

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EXAMINER	
OKORONKWO, CHINWENDU C	
ART UNIT	**PAPER NUMBER**
2136	

NOTIFICATION DATE	DELIVERY MODE
10/09/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/808,629	COX ET AL.	
	Examiner	Art Unit	
	Chinwendu C. Okoronkwo	2136	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 March 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-33* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-33* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *24 March 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Applicant's claim for the benefit of a prior-filed application under 35 U.S.C. 119(a)-(e) or under 35 U.S.C. 120, 121, or 365(c) is acknowledged. Priority is claimed under Provisional Applications 09040898.

Information Disclosure Statement

2. For the record, the Examiner acknowledges that the IDS submitted on 04/24/2003. It has been received and considered.

Oath/Declaration

3. For the record, the Examiner acknowledges that the Oath/Declaration submitted on 03/21/2004 has been received and considered.

Drawings

4. For the record, the Examiner acknowledges that the Drawings submitted on 10/09/2003 have been received and considered.

Specification

5. For the record, the Examiner acknowledges that the Specification submitted on 10/09/2003 has been received and considered.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-10, 15-21, 27-29 and 30-33 are rejected under 35 U.S.C. 102(b) as being disclosed by Malkin et al.

Regarding claims 1, 27- 29 and 31, Malkin et al., discloses a method for blocking an attack on a private network implemented by a routing device interconnecting the private network to a public network, comprising: receiving a request for connection from an initiator, over the public network (col. 2 lines 40-47 – "RAS using [identification] ... information to generate a remote authentication request that is sent to the appropriate Authentication Server (AS)"); requesting an acknowledgment from the initiator of the request (col. 2 lines 57-64 – "Once the user is authenticated by the AS , the Remote Access Server (RAS) begins to establish a 'tunnel' with the appropriate gateway by generating and sending a tunnel ***registration request***"); determining whether the acknowledgment has been received within a predetermined amount of time; and denying the request if the acknowledgment is not received within the predetermined amount of time

(col. 2 lines 65-67 and col. 3 lines 1-5 – "gateway completes the tunnel by responding to the RAS with a tunnel registration response. Once the tunnel is complete, the authentication phase of PPP is complete and the RAS may then perform the Network Control Protocol (NCP) negotiations with the remote node in order to finish establishing open communication between the remote node and the home network").

Regarding claim 2, Malkin et al., discloses the method of claim 1, wherein the public network is the Internet (col. 3 lines 61-67 and col. 4 lines 1-9 – establishes a connection using the "Internet Protocol").

Regarding claim 3, Malkin et al., discloses the method of claim 2, wherein the routing device is a firewall providing access to the Internet (col. 2 lines 57-64 – "gateway").

Regarding claim 4, Malkin et al., discloses the method of claim 1, further comprising processing the request if the acknowledgement is received (col. 2 lines 65-67 and col. 3 lines 1-5 – "gateway completes the tunnel by responding to the RAS with a tunnel registration response. Once the tunnel is complete, the authentication phase of PPP is complete and the RAS may then perform the Network Control Protocol (NCP) negotiations with the remote node in order to finish establishing open communication between the remote node and the home

network").

Regarding claim 5, Malkin et al., discloses the method of claim 1, further comprising adding an IP address of the initiator to a cache of IP addresses if the acknowledgement is not received (col. 4 lines 9-14 – "the RAS internally stores the information provided by the Tunnel Management System (TMS)").

Regarding claim 6, Malkin et al., discloses the method of claim 5, further comprising denying access through the routing device to any IP address on the cache of IP addresses (col. 5 lines 20-25 – "after a predetermined number of unsuccessful attempts, the RAS will terminate the PPP connection with the remote node [using the information internally stored information regarding said node]").

Regarding claim 7, Malkin et al., discloses the method of claim 1, further comprising storing information about the initiator on a system log for analysis by the system administrator (col. 4 lines 9-14 – "the RAS internally stores the information provided by the Tunnel Management System (TMS)").).

Regarding claim 8, Malkin et al., discloses the method of claim 1, further comprising storing information about the request for connection on a system log

for analysis by the system administrator (col. 4 lines 9-14 – "the RAS internally stores the information provided by the Tunnel Management System (TMS)").).

Regarding claim 9, Malkin et al., discloses the method of claim 1, further comprising determining if a prior request for an acknowledgement has been sent to an IP address associated with the initiator and been unacknowledged within a predetermined amount of time, if the acknowledgement is not received (col. 5 lines 20-25 – "after a predetermined number of unsuccessful attempts, the RAS will terminate the PPP connection with the remote node").

Regarding claim 10, Malkin et al., discloses the method of claim 1, further comprising using diagnostic tools to determine additional information about a source of the request for connection (col. 2 lines 25-39 – "the remote node queries the service provider's TMS to obtain [additional information]").

Regarding claim 15, Malkin et al., discloses a method for blocking an attack on a private network implemented by a routing device interconnecting the private network to a public network, comprising: receiving an incoming data packet from the public network; comparing a source address of the data packet against known internal addresses of the private network; determining if the source address matches a known internal address; and if there is a match: dropping the data packet; analyzing a header of the data packet; determining information

regarding a history of the packet; determining a real source of the data packet using the information regarding the history of the packet; and refusing to process any additional data packets received from the real source of the data packet (Rejected under the same rational as claim 1).

Regarding claim 16, Malkin et al., discloses the method of claim 15, further comprising storing data about the data packet on a system log, for use and analysis by a system administrator (Rejected under the same rational as claim 7).

Regarding claim 17, Malkin et al., discloses the method of claim 15, wherein the public network is the Internet (Rejected under the same rational as claim 2).

Regarding claim 18, Malkin et al., discloses the method of claim 17, wherein the routing device is a firewall providing access to the Internet (Rejected under the same rational as claim 3).

Regarding claim 19, Malkin et al., discloses the method of claim 15, further comprising forwarding the data packet to the private network if there is not a match (Rejected under the same rational as claim 6).

Regarding claim 20, Malkin et al., discloses the method of claim 15, further comprising adding an IP address of the data packet to a cache of IP addresses if there is a match (Rejected under the same rational as claim 6).

Regarding claim 21, Malkin et al., discloses the method of claim 20, further comprising denying access through the routing device to any IP address on the cache of IP addresses (Rejected under the same rational as claim 6).

Regarding claim 30, Malkin et al., discloses a system for blocking an attack on a private network, comprising: means for interconnecting a private network to a public network; means for receiving a request for connection from an initiator, over the public network; means for requesting an acknowledgment from the initiator of the request; means for determining whether the acknowledgment has been received within a predetermined amount of time and means for denying the request if the acknowledgment is not received within the predetermined amount of time (col. 5 lines 20-25 – "after a predetermined number of unsuccessful attempts, the RAS will terminate the PPP connection with the remote node").

Regarding claim 32, Malkin et al., discloses a software embodied in a computer-readable medium, the computer-readable medium comprising code operable to: interconnect a private network to a public network; receive a request for connection from an initiator, over the public network; request an acknowledgment

from the initiator of the request; determine whether the acknowledgment has been received within a predetermined amount of time; and deny the request if the acknowledgment is not received within the predetermined amount of time (col. 7 lines 7-17).

Regarding claim 33, Malkin et al., discloses a Software embodied in a computer-readable medium, the computer-readable medium comprising code operable to: receive an incoming data packet from the public network; compare a source address of the data packet against known internal addresses of the private network; determine if the source address matches a known internal address; and if there is a match: drop the data packet; analyze a header of the data packet; determine information regarding a history of the packet; determine a real source of the data packet using the information regarding the history of the packet; and refuse to process any additional data packets received from the real source of the data packet (col. 7 lines 7-17).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 11-14 and 2-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Malkin et al. (US Patent No. 6,061,650) and further in view of Levinson et al. (US Application Publication No. 20030053170).

Regarding claim 11, Malkin et al., is silent in disclosing the method of claim 10, wherein using diagnostic tools to determine additional information about a source of the request for connection comprises using trace root diagnostic tools to determine information about the source of the request for connection, however Levinson et al. does disclose network tools used in collection additional about a network (0008 – "network diagnostics"). It would have been obvious for one of ordinary skill in the art to modify the disclosed network diagnostic functions of Levinson et al. into the specific network diagnostic tools mentioned within the claim language such as "trace root, NeStat (NS) lookup, ping, etc." It would have been obvious because one of ordinary skill in the art would know that the disclosed "network diagnostic" functions comprises these specifically mentioned tools.

Regarding claim 12, Malkin et al., discloses the method of claim 10, wherein using diagnostic tools to determine additional information about a source of the request for connection comprises using ping diagnostic tools to determine

information about the source of the request for connection (Rejected under the same rationale as claim 11).

Regarding claim 13, Malkin et al., discloses the method of claim 10, wherein using diagnostic tools to determine additional information about a source of the request for connection comprises using NS lookup diagnostic tools to determine information about the source of the request for connection (Rejected under the same rationale as claim 11).

Regarding claim 14, Malkin et al., discloses the method of claim 10, further comprising forwarding the additional information to a system administrator via electronic mail (0046 – "send a electronic message").

Regarding claim 22, Malkin et al., discloses the method of claim 15, further comprising using diagnostic tools to determine additional information about a source of the data packet (Rejected under the same rational as claim 11).

Regarding claim 23, Malkin et al., discloses the method of claim 22, wherein using diagnostic tools to determine additional information about a source of the data packet comprises using trace root diagnostic tools to determine additional information about the source of the data packet (Rejected under the same

rational as claim 11).

Regarding claim 24, Malkin et al., discloses the method of claim 22, wherein using diagnostic tools to determine additional information about a source of the data packet comprises using ping diagnostic tools to determine additional information about the source of the data packet (Rejected under the same rationale as claim 11).

Regarding claim 25, Malkin et al., discloses the method of claim 22, wherein using diagnostic tools to determine additional information about a source of the data packet comprises using NS lookup diagnostic tools to determine additional information about the source of the data packet (Rejected under the same rational as claim 11).

Regarding claim 26, Malkin et al., discloses the method of claim 22, further comprising forwarding the additional information to a system administrator via electronic mail (Rejected under the same rational as claim 11).

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chinwendu C. Okoronkwo whose telephone number is (571) 272 2662. The examiner can normally be reached on MWF 9:30 - 7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nasser Moazzami can be reached on (571) 272 4195. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CCO

September 29, 2007

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9/29/07